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ABSTRACT

The University of Mid-America's (UMA) goals and plans are reviewed in this evaluation planning paper. Several issues effecting the overall shape of external evaluation activities over a five-year period are described. Focus in this report is on UMA's philosophical orientation and future plans, the rationale for the open learning approach, UMA open learning goals, and the UMA open learning model. UMA's intended status in 1980 is discussed in terms of the delivery system, curriculum, course development, and consortium planning and development. Basic considerations in designing an evaluation plan are described, such as the evaluation setting, evaluation audiences and information needs, and in-house and external evaluation responsibilities. An outline for external evaluation activities is presented for each of the five years. As a planning document, this report presents the key issues and some ideal solutions. (LBH)

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PLANNING FOR THE EXTERNAL EVALUATION OF THE UNIVERSITY OF MID-AMERICA

Working Paper No. 2

Office of
Research and Evaluation

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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December, 1974

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PLANNING FOR THE EXTERNAL EVALUATION OF THE
UNIVERSITY OF MID-AMERICA

Introduction

In the latter half of 1974, a new approach to postsecondary education moved out of the planning stage and into operation with its first course offerings. This approach is being developed by two, interrelated organizations, a regional corporation, the University of Mid-America (UMA), and its prototype delivery system, the State University of Nebraska (SUN). The existence of these organizations represents a major commitment by the federal government to serve the educational needs and interests of adults who cannot or will not avail themselves of existing continuing education opportunities.

Recently, UMA has been developing plans for the coming five years. By 1980, it intends to have a well-developed curriculum with operating delivery systems across several states providing open, flexible, and responsive educational services to its clientele.

The only way for UMA to find out if it achieves these goals is through extensive and vigorous evaluation of all aspects of the project. If UMA is to serve as a model solution for a wide range of adult education problems, then a large and diverse body of valid information has to be collected on its procedures, costs, benefits, and effectiveness. Much of this information will be used by UMA on a day-to-day basis to guide its activities. Much of it will also be needed by external audiences trying to decide whether to commit their resources to this kind of endeavor.

The University of Mid-America recognizes these evaluation requirements, and has already established its own in-house office for research and evaluation. However, it also recognizes the special advantages of information and judgments obtained through evaluations conducted by people free of commitment to UMA and

its day-to-day trials and tribulations. This paper outlines the plans for an extensive external evaluation of UMA over the next five years.

This paper does not specify the exact questions to be answered, instruments to be used, and standards to be applied during an external evaluation. Such specificity could betray the utility of such an external evaluation. However, it is UMA's responsibility to provide parameters for external evaluators, in order that the information and judgments they develop will be useful both to UMA, and its various audiences. UMA is a unique organization and the evaluation possibilities are endless. It is hoped that this paper will be useful to external evaluators as they frame their own evaluation plans, and to a variety of other audiences as they try to clarify their questions about UMA. Grobman (1968, p. 13) effectively defends the rationale for the kind of plan presented here.

> There are far more evaluative questions than can be undertaken or than would pay off for a single curriculum. No single set of questions is suitable for all projects. Questions of concern to one project may be irrelevant or of minimal importance to another. Some curriculum developers have called in experts to provide a ready-made design for them. While suggestions from outsiders can be useful, having an outsider create questions important to the expert may not be important to the project. Some projects have reviewed the literature seeking an answer; others have visited similar projects. The experts, the literature search, and the visits may be relevant and useful, but they may not provide an instant, relevant design. If the evaluation is to be useful, each project must develop its own unique pattern, reflecting the interests and circumstances of the project and the clientele for whom the curriculum is planned.

Although a number of factors conspire to keep this plan from being extremely specific, the plan does answer some basic questions and provide overall directions for considering others. Stake (1969, p. 17) has outlined three questions that need to be answered in planning an evaluation.

1. What is the entity that is to be evaluated?
2. Whose standards will be used as reference marks?
3. What subsequent decisions can be anticipated?

The following discussion deals with these and related questions.

The first section of this paper describes both the subject for evaluation and its historical setting, through a review of the organization's goals and plans. Following that is a review of a number of issues effecting the overall shape and direction of external evaluation activities. The final section outlines the general progression of external evaluation activities over the five year period.

THE SUBJECT OF EVALUATION

The University of Mid-America has just completed a major review of its plans and procedures. The results of this review are presented in A Model Regional Open Learning System: Proposal to the National Institute of Education (October, 1974). This discussion draws heavily upon that document which should be consulted for further elaboration.

Brief History of UMA and SUN

> The Commission on Non-Traditional Study and the Newman Task Force Reports have clearly called to the country's attention the need for open learning. In recent years, two facts have become abundantly clear: the American dream of equality has not extended to postsecondary education; and the orderly functioning of a truly open society demands that education reflect this openness, in access, in content, and in structure. The value of education has always been assumed in America; but in previous generations education was completed early in life, as preparation for the pursuit of a vocation. In a rapidly changing technological world, the old concept of an early period of education, followed perhaps by infrequent periods of "re-education" or "continuing education," is no longer sufficient; what is needed is a carefully planned system of recurrent lifelong learning, in which education becomes a continuous and regular part of everyday life. (UMA, 1974, pp. i-ii)

After an initial University of Nebraska study on the various issues reviewed above, the State University of Nebraska was founded (1971) as an attempt to develop a viable open learning system. The new project was supported by

grants from the U. S. Office of Education and the National Center for Educational Technology.

> During this planning period, strategies for the design and delivery of mediated adult education were studied in depth, and experimental lesson modules were developed and tested. Three market and clientele surveys of the potential audience for open learning were commissioned. The resultant data uniformly showed that 2% of the adult population were sufficiently interested in postsecondary education to enroll and pay tuition. SUN subsequently received grants from the National Institute of Education to complete a series of specific work assignments directed toward completion of planning for a multiple-year regional open learning experiment. (UMA, 1974, p. iii).

One of the primary concerns of the planning period was the development of a delivery system capable of reaching a wide audience across a number of states in the region. It was decided that each participating state in the Mid-America region would have its own delivery system; SUN would be the prototype system. In this way, each state's delivery system could take advantage of local educational and communications resources. To operationalize this plan, the University of Mid-America was incorporated on a non-profit basis "specifically for the regional production and dissemination of open learning courseware, and coordination of development of delivery systems in at least the states of Missouri, Iowa, Kansas, and Nebraska (UMA, 1974, p. iii)." At the present time, Iowa State University, the University of Kansas, Kansas State University, the University of Missouri, and the University of Nebraska are participating members of UMA. SUN, as the Nebraska delivery system for UMA, is currently offering the first two courses. Both courses use a variety of media, including television broadcast over the state ETV network. Four learning centers have also been established across the state. The main administration and production staff for both UMA and SUN is located on the University of Nebraska's Lincoln campus.

In one sense, the external evaluators will have two separate entities for evaluation; UMA and the individual state delivery systems such as SUN. Of the

two, SUN is the oldest and the only entity currently performing anything close to its eventual role. UMA is still in the planning stages, and its eventual characteristics depend in large measure on SUN's successes and failures. For some evaluation activities, both entities can be dealt with as one; but for others, careful distinctions should be made. The goals and scenarios of the five year plans provide further explanations in this area.

Philosophical Orientation and Future Plans

The following material provides a synopsis of UMA's philosophical orientation, overall goals, and operational plans. It represents a combination of excerpts from several areas of the 1974 proposal (cited earlier), rearranged here in a conceptual order from global to specific concerns.

The material is divided into five sections. The first three sections describe UMA's orientation to postsecondary education. In the first is a review of the rationale for an open learning approach to the delivery of educational services. This is followed by UMA's interpretation of the rationale in terms of its mission and open learning goals. Finally, these broad goals are operationally defined in the form of twelve characteristics for UMA's open learning model.

The remaining two sections review UMA's organizational plans. The first of these provides four scenarios for the expected status of various UMA elements in 1980; the delivery system, curriculum, course development, and consortium development. Finally, the last section describes those specific tasks UMA has set for itself in the next eighteen months.

It is hoped that the following quotations provide more than just a review of UMA's rhetoric. Although the utility of these statements for planning evaluations will vary widely, they do serve as some indication of the project's

complexity. The external evaluator may have to develop more specific goal statements, but initially, these provide enough detail to identify the crucial issues behind a long range evaluation plan.

The Rationale for the Open Learning Approach

> Education generally has been viewed in this country as a social good deserving support from public funds. The benefits derived from education, especially postsecondary education, clearly include:
>
> 1. Self-development of individuals, so that they can lead fuller and richer lives and are able to grow emotionally and intellectually through understanding themselves and their world better;
>
> 2. Provision of skills which will enable persons to be employed at occupations requiring those skills, and thus contribute to their economic well-being as well as to that of society as a whole;
>
> 3. Expansion of the orderly processes of citizen participation in democratic government by insuring that the largest possible number of citizens have sufficient educational background to understand the processes of government, to be able to discuss intelligently matters of public policy, and to have the analytic and critical abilities to make informed judgments on public issues.
>
> The purpose of a postsecondary open learning system is to extend opportunity for these benefits to a wider group of people, including those for whom the rigidities of time, space, and curricular and course requirements in traditional institutions make learning infeasible or difficult, and those who are reluctant to enter the present system because of their age, educational, cultural, or socio-economic background; to provide these benefits through educational opportunities that present institutions and agencies do not provide; and to extend those benefits in new ways that may be more effective in terms of increasing the amount and quality of learning and the learner's sense of control over his learning, and in terms of individual and social cost. (UMA, 1974, pp. 12-13)

University of Mid-America Open Learning Goals

> The University of Mid-America (UMA) is being created to provide such an open learning system for persons in those states being served by member institutions of MASUA (Mid-America State Universities Association) who are unable or are reluctant to pursue their college-level educational goals in more traditional ways. UMA is a major experiment in American post-secondary education, whose mission can be broadly characterized as:

A. Creating and implementing a variety of learning approaches to provide high quality, relevant college level educational experiences primarily for people who heretofore have not had access to, or have not taken advantage of, college-level education

while

B. Carefully and systematically studying and documenting the effects and consequences of alternative ways of developing and providing these educational opportunities.

In UMA, open learning implies a commitment to increased accessibility to college-level education, and this accessibility means more than physical convenience -- it means a readiness to meet students where they are educationally, as well as geographically, and to provide careful academic counseling and assessment to try to help them meet their educational objectives. The goals of any open learning program ought to be to make learning available to all who want it, regardless of where they live or what hours they work. In addition, open learning should reduce the constraints on how people can learn by utilizing new educational techniques and methodologies and should provide new opportunities for interdisciplinary study.

The open learning goals of UMA may be stated as follows:

1. To direct its efforts for the benefit of a population heretofore unreached by existing post-secondary educational institutions, and to explore ways of delivering education to students hesitant to approach a traditional educational setting. The program will direct attention to those students who cannot or who are reluctant to attend a regular campus-based program. It is not the intent to seek out students who would otherwise enroll in existing programs in private or public colleges or universities.

2. To make available educational opportunities, to serve both of the following functions:

   A. To provide instruction for advancement toward a degree in traditional educational institutions. To that end, UMA will work closely with various colleges and universities to establish an acceptable curriculum for those students who wish ultimately to work toward a degree on a traditional campus.

   B. To satisfy the personal or professional interests of individuals to increase the quality of their life through education, without necessarily pursuing a degree. To that end, UMA will seek to create and establish, in concert with colleges and universities, offerings directed at contemporary issues and human problems, including some continuing professional education, that will appeal to a broad range of interests and needs. Such offerings would provide educational services without necessarily offering academic credit.

Appropriate faculty will participate in the development, review, and delivery of all UMA offerings.

3. To provide some new external degree programs in the future for those people who wish to obtain an undergraduate degree, but who are reluctant to or who cannot enroll in an existing educational institutions. Probably only a limited number of degree areas might be available through UMA.

4. To prepare, deliver, and coordinate interdisciplinary offerings in an attempt to create learning opportunities not always available in traditional institutions. Such courses could also be adopted by existing colleges and universities to augment their own on-campus programs.

5. To make available in each state an educational program that focuses on the learner, using both UMA-developed offerings and existing institutional resources to facilitate independent, individually tailored progress. In this connection, faculty roles in advising and individual counseling are especially important.

6. To explore and document a variety of approaches to the development and delivery of instruction, and to explore alternatives in content and form. Careful attention will be given to the effects of these various alternatives on learning, attitudes toward learning, cost, effectiveness, etc.

7. To maintain a program with a high level of academic quality with costs to students which are reasonable, and with financial aid available to those who need it.

UMA proposes to make major strides toward understanding the problems and potentials of extending the educational franchise, while providing an academically respectable, socially meaningful, and personally satisfying educational program for a new college-level education clientele. (UMA, 1974, Appendix B)

Characteristics of UMA's Open Learning Model

Derived from the UMA open learning program goals..., the particular postsecondary open learning model which UMA proposes will, therefore, have the following characteristics:

1. A policy of unrestricted admission, so that anyone who wishes to learn may do so, but with a primary target audience of adults who are interested in continuing their education, but who cannot or are reluctant to participate in campus-based programs;

2. An understanding of the needs and educational objectives of its learners, with a commitment to using that understanding

in the planning of learning opportunities made available through the system;

3. The willingness and ability to try to meet the learner where he or she is educationally, by recognizing individual differences in entry levels, and by affording the learner advice and counsel as to how best to use resources available throughout the system to achieve personal or professional goals. This includes a willingness to help the learner overcome any initial reluctance to attempt postsecondary education. This might be accomplished by helping the learner design learning programs which will maximize the possibility of success, while recognizing that not all potential learners will be able to achieve success in college-level work;

4. Provision of learning opportunities which enable the learner to learn at times and at places convenient to him, without prohibitive interference with job, family, or other obligations;

5. Reduction of constraints on <u>how</u> people can learn by utilizing a variety of educational media and materials, and personal contacts with faculty counselors, and other learners. Thus, persons can learn in ways which are most comfortable for them;

6. Provision of learning opportunities which allow the student flexibility in constructing his own learning sequence, so that UMA "courses" do not have single entry and exit points, nor single evaluation requirements, for all learners;

7. Provision of learning opportunities which are not dictated by the requirements of individual disciplines, but address themselves to subjects or problems that draw on whatever disciplinary expertise is appropriate;

8. The use of local and regional resources that already exist, in cooperation with present institutions, to expand the educational opportunities available to the learner in his own environment;

9. Reasonable costs, both to individuals and to society, so that the individual and societal benefits of learning become available to the target learners in this system at no economic penalty in comparison with the cost of attending traditional campuses;

10. An emphasis on learning rather than the meeting of arbitrary standards of time, courses, or curricular requirements and recognition of <u>achievement</u> of learning by students, however it occurs;

11. In courses bearing college credit, a level of academic quality (meaning the achievement expected of learners) no lower than that at a traditional university, so that work accomplished through the open learning system is fully accepted by other institutions;

12. More openness to self-examination, to research and evaluation than has heretofore been the case in postsecondary education; this openness includes a commitment to evaluation of learner achievement, to evaluation of effectiveness in meeting institutional and learner objectives, to incorporation of the results of these evaluations into policies and procedures, and to research that will contribute to generalizable knowledge about how the educational franchise can best be extended to all who wish it. (UMA, 1974, pp. 15-17)

UMA's Intended Status in 1980

The delivery system.

By 1980, statewide delivery systems will be fully operational in the UMA states, making available to interested learners a range of learning opportunities including UMA-developed courseware and local and regional resources in cooperation with existing institutions. Thus each system will expand the educational opportunities available to the learner in his own environment, as noted in the open learning characteristics listed in Chapter 1.

Each system will use a variety of mechanisms (for example, in Nebraska a network of learning centers is planned throughout the state), to provide services to learners necessary to realize the commitment to meet the learner where he or she is educationally. In such learning centers, learners will be able to receive advice and counsel as to how best to use all these learning opportunities to achieve personal or professional goals; they will have access to all UMA course materials so that they can review or work at an accelerated pace, thus being freed even further from time constraints; they will be helped to overcome any initial reluctance to attempt postsecondary education and will be assisted in the design of learning programs appropriate to their educational background level and abilities.

The learning centers will be staffed with persons sensitive to individual differences and knowledgeable about adult learning and about local educational resources. Thus, it will be necessary for UMA, by 1980, to have perfected means of selecting and training those staff members.

By 1980, the UMA office of Research and Evaluation, working with the individual state delivery systems, will have devised effective means of obtaining information about and feedback from learners. This information will be used in both the planning and modification of delivery system functions; and, as described in previous chapters, it will also be used by UMA in curricular planning, course development, and for the advancement of general knowledge about adult learning and social changes brought about by extension of the educational franchise.

Fundamentally, from the point of view of the learner, the delivery system will by 1980 be a responsive, person-oriented way in which the learner can be helped to design his own path to a postsecondary educational goal. SUN and the other delivery systems in other UMA states will serve an important clearinghouse function linking learners with the resources and help they need to achieve their goals and objectives. While UMA-developed courses will certainly be important resources in this linkage, other resources will be sought and used as needed. (UMA, 1974, pp. 22-23)

Curriculum.

By 1980, UMA will have planned and developed curricula (i.e., patterns of educational opportunities for various target populations) that both recognize and honor the characteristics of an open learning system as described in Chapter 1. Those curricula will affirm that one of the major purposes of postsecondary education is to contribute to the self-development of individuals, so as to foster advancement of a society of people who are able to lead rich, full lives. The curricula will thus be particularly sensitive to the differing needs and hopes of a range of kinds of people. This attention to individual people and groups will not be simply rhetorical, but will be reflected in the courses and other educational experiences created, and in the way those experiences are made available to people. More importantly, learners will participate in curriculum development teams, and by contributing to the deliberations of curriculum planners.

While responding to the needs of individuals <u>as</u> individuals, the curricula will also recognize the complex interrelationships that constitute the society in which individuals live. Therefore, the curricula will contain experiences designed to increase the capacity of individuals to function as citizens in democratic government by giving them the investigative tools and by enhancing the curiosity that is so important to participation in matters of collective policy. One of the characteristics of UMA curricula will be a commitment to fostering a reflective quality among those who engage in the UMA program.

In addition, the patterns of educational opportunities created by 1980 will recognize that individuals must also develop skills that will enable them to be employed at a variety of kinds of occupations. UMA curricula will strike an appropriate balance between programs designed for specific career training or retraining, a liberal arts education, or personal enrichment. This balance will have been determined by experimental offerings designed for various target audiences to test demand, costs, effectiveness, and need for open learning.

At a more specific level: By 1980, UMA will have the experience necessary to more carefully define the kinds of people for whom the program is designed. UMA cannot be all things to all people; UMA's decisions as to which groups or individuals receive priority

attention will have been refined on the basis of experience. Within five years, UMA will be able to describe comprehensively who has participated in UMA programs, and the extent to which UMA is meeting expectations. (This analysis is already under way with the specific data generated by enrollment in SUN's first two course deliveries.) These data will be used continuously to guide ongoing planning and development decisions.

By 1980, UMA will know a great deal more about how adults learn. Research on learning will have been conducted, and the results used to assist in curriculum planning decisions. UMA will have some insight into how curricula can be designed to be responsive to varied and changing learner needs and expectations.

In addition, by 1980 UMA will have assisted individual states to establish delivery systems that are most suitable for achieving the goals of UMA's curricular philosophy. The feedback from those delivery systems will, in turn, assist UMA in making course selections in line with the various curricula developed to address target audiences. (UMA, 1974, pp. 46-47)

Course development.

By 1980, UMA will have created or acquired a minimum of 55 courses, and will have made those courses available to individual state delivery systems. Courses developed or acquired by UMA will be distinguished by their commitment to flexible use by students, putting into practice the commitment to try to meet individual learner needs, interests, and expectations. In addition, these courses will be viewed as one major component of the overall resources available to learners in any given state. It will be recognized that the services provided by state delivery systems include more than the delivery of the courses created or acquired by UMA, but certainly those courses will be an important aspect of overall state educational environments.

By 1980, UMA will have catalogued and evaluated relevant open learning courseware existing throughout the world. The course evaluation and acquisition provedure developed in 1974 will have been thoroughly tested, to insure that UMA selects from existing course materials those most likely to contribute to the goals of UMA, of state delivery systems, and of individual learners. UMA will have determined the most cost-effective means of acquiring and adapting a variety of kinds of existing courseware, and will have made available both details of the acquisition and evaluation process and data concerning problems associated with adaptation of courses to other open learning systems or traditional institutions interested in acquiring and adapting courses, including courses developed by UMA.

The instructional development process utilized by UMA to create its own courses will have been thoroughly studied and refined by 1980. Alternative design and production approaches will have been tried, and guidelines developed as to the most effective means of

creating various kinds of courses. For example, a thorough analysis of the course team structure will have been conducted over the five-year period, leading to generalizable observations as to the structure and internal management procedures that seem to work best.

UMA will have experimented with alternative means of conducting formative evaluation in support of the course development efforts, and will have selected particular procedures that provide proven useful information to designers, producers, and other interested people. In addition, special attention will have been paid to the relative effectiveness of various kinds of media for various kinds of instructional purposes, and some media selection guidelines, based on both theory and practice, will have been developed.

By 1980, UMA will have gathered considerable data on the extent to which UMA courses meet the needs, interests, and expectations of individual learners and target groups for which courses have been developed. These data will have been consistently used to aid in course development processes, and will have been made available to other interested agencies.

Finally, UMA will have engaged systematically in a number of studies designed to shed light on the costs and effectiveness of various kinds of courses. As a result of these studies, better decisions about how to invest resources available for course development will be possible. Included in these studies is the difficult question of how to define differences among courses, and how to ascribe differing outcomes to different causes. These studies will in no way be completed by 1980, but initial generalizable cost-effectiveness data will have been generated. (UMA, 1974, pp. 67-69)

Consortium development.

By 1980, the University of Mid-America (together with its associated state delivery systems) intends to be an operational entity which has the characteristics previously identified in Chapter 1. UMA will be one aspect of a model regional open learning system which has come to an understanding of the needs and objectives of its audience and which uses that understanding in the planning of curricula, in courseware development, and in the delivery systems operated by the states associated with UMA. By 1980, each of these associated delivery systems will have been made fully operational, using local and regional resources in cooperation with existing state institutions to expand the educational opportunities available to the learner in his own environment.

Finally, by 1980, UMA and its delivery systems will be operating at a level of cost which is reasonable both to individuals and to society. Decisions based both on planning and on experience will have been made about the important questions of cost-effectiveness of the various components (delivery in all its forms, course develop-

ment, etc.) of the system and adjustments made to improve the cost-effectiveness of the entire operation. A prime goal will be that the system is, by 1980, operationally viable without any continuing support from NIE.

In summary, UMA will have reached a more precise definition of itself as an institution seeking to fulfill the mission outlined in Chapter 1. (UMA, 1974, pp. 99-100)

Tasks for Next Eighteen Months, 1975-1976

The following pages summarize a more detailed discussion presented in Chapter Six of UMA's 1974 proposal (pp. 128-173). This summary reviews the expected outcomes for tasks to be completed in the near future.

Delivery of educational opportunities.

A. Examine effectiveness of management and procedures in the open learning systems.

As a result of the formative nature of this work, changes should be made as needed in managerial procedures, resulting in refined operating procedures.

A summative evaluation of management procedures should be used in refining overall delivery system procedures, and should be instrumental in formulating operating procedures for delivery systems in other states.

B. Begin determination of the effectiveness of learning centers.

This is a task that will continue beyond the grant period. During the 18 months, UMA staff will have gathered initial data and analyzed it to examine such factors relevant to effectiveness as: the role of the learning center coordinator and support staff, the relation of learning centers to other institutions of higher education, the relation of course faculty to learning centers, the physical design of centers, and the role of educational information gathering and dissemination through the centers.

Based on this preliminary analysis, UMA staff and the Academic Council will refine the conception of a learning center and begin development of operational criteria for learning center operation.

Throughout this process, consultants and delivery system personnel will be involved.

The beginnings of generalizable data about learning center effectiveness will be available for other state delivery systems and other open learning programs.

C. Develop effective means for training faculty and learning center staff.

A detailed plan will have been formulated for developing and training open learning faculty and learning center staff. This plan will include such topics as: desired background, personality characteristics required, information and skills which must be acquired, and ways to achieve those goals through training (and selection).

Guidelines for developing such training programs will grow out of this work, to be made available to other UMA states for the establishment of their delivery systems.

D. Begin study of reasons for completion or non-completion of open learning courses and programs.

Tentative recommendations to delivery system staffs and course teams about attrition will have been developed. These may result in adjustments in admissions policy, delivery system operations, or course design.

An ongoing procedure for continuing this study and feedback on a permanent basis will have been established. Information and tentative conclusions gathered will have been made available, through UMA, to other state delivery systems.

E. Assist states associated with UMA to establish coordinated state delivery systems.

Guidelines will have been developed under the auspices of the UMA Academic Council for establishing open learning state delivery systems. Those guidelines will have been carefully reviewed and revised in light of experience in Nebraska and elsewhere, and will be made available through planned dissemination and by request to anyone interested in such guidelines. They will also serve to guide the planning of the UMA states.

Each UMA state will, by December, 1975, have established a comprehensive plan for the delivery of open learning educational services to residents of that state. The plan will identify

available resources, establish delivery procedures, and include commitments from appropriate agencies, institutions, and/or individuals (e.g., educational television stations, newspapers, community colleges) to perform certain services relevant to that delivery system. Operational development of state systems will have begun by the end of 1975 with initial assistance from NIE funds.

F. Determine whom UMA should and does serve.

The primary outcome of this work will be an improved understanding of whom UMA is serving, and thus an opportunity for a more realistic picture of whom UMA might serve. These findings should be influential in determining curriculum direction and in course selection and delivery.

A second outcome of this work will be a body of data that will enable learning center coordinators to counsel more adequately their clientele.

Curriculum planning.

G. Develop conception of and plan UMA's ongoing curriculum.

UMA will develop a curricular philosophy as a result of the synthesis of the interests of learners and a normative determination of which needs will be and can be served and the ways in which those will be met. This philosophy will be an extension of the open learning goals described in Chapter 1 of this document.

This curricular philosophy will have at least two distinct but related parts:

a) It will specify criteria for the production and/or acquisition of courses. Such oft-used terms as "orientation to the learner," "individualized instruction," "modularization," "interdisciplinary," "problem-centered," and "academic quality" will be given more precise and operational definitions. It will specify what is meant by saying that the "value-implications" of a subject matter will be presented, and will detail the cognitive and non-cognitive goals for UMA.

b) The curricular philosophy will also contain criteria concerning how courses relate to one another and how they might be put into large groups (e.g., degrees). These criteria will include a discussion and decision as to whether UMA should have one curriculum or many curricula (or degrees); they will include a discussion and decision concerning the

kinds of personal and social change to be sought as a result of learning experiences in UMA.

H. Begin study of adult learning as it relates to UMA's audience.

The guidelines developed will be used in UMA planning, as well as in course development efforts, to insure that what is known about adults and how they learn will be considered in all such decisions.

The adult learning guidelines will be available to interested parties.

Course development.

I. Produce and/or acquire 12 courses, with attention to design flexibility and refined procedures for the acquisition process.

Twelve courses will have been completed or will be in various stages of design or production, thus providing a full array of educational offerings for UMA delivery systems and for lease elsewhere.

Improved design techniques for modularizing courses to increase flexibility will have been developed and tested in use.

Refined procedures for the entire process of acquiring and adapting existing courseware will be available for use in UMA and as models for other open learning systems.

J. Determine the effectiveness of UMA courses.

Data will be available which are:

Useful in curriculum planning (including implications for the acquisition and selection of UMA courses), course development (including implications for courseware design, production, and refinement), and learning center administration (including implications for advising, counseling, and tutoring).

Useful in portraying course effectiveness to students and the UMA publics (taxpayers, institutions of higher and secondary education, board members, sponsors, etc.).

K. Begin explorations into the potential and limitations of various media roles and components within UMA courses.

Of primary importance will be the development of a beginning set of guidelines for media selection in UMA courses, insofar as affective measures are important considerations in media selection. These guidelines should be extremely useful in informing course development efforts.

Work done at UMA on this issue will be available for coordination with work done at Children's Television Workshop, and the British Open University, on the use of television in instruction.

L. Develop efficient ways to revise courses to prevent obsolescence and to reflect data on their effectiveness.

UMA will have developed a set of principles and procedures for course revision and suitable timelines for that revision process. These principles and procedures will contain cirteria covering the extent to which a course can be revised over a given period, the relation between the costs of revision and the value of revisions in the course, the relation of the revision of one course to that of another, and, most importantly, there will be an operational model concerning how the results of learner surveys, content consultant opinions, and the judgment of UMA staff can best be fed back into the course development process. This will involve an operational decision concerning the relation between the study of the value and effectiveness of courses and the course team.

Experience gained from application of this process during 1975-76 will be used to modify the process as necessary and to provide guidelines for other producers of open learning coursewares.

M. Continue examination of the instructional development process, including design, production, and evaluation, to improve effectiveness of the process.

A refined process (or multiple processes) of instructional development will be established for UMA. This will not be a rigid structure, but a set of guidelines, definitions of roles, and delineations of responsibility that can assist all UMA course teams.

Increased ongoing communication among those involved in course development in UMA will be established.

Generalizable data on what UMA has learned about salient aspects of instructional design of open learning courseware will be available.

Consortium planning and development.

N. Determine whether UMA will grant credit and/or degrees.

The primary outcome related to this work is that the UMA Board will, by June, 1976, decide whether UMA will grant credit for its courses, and will decide whether UMA itself will become a degree-granting institution. If the decision is affirmative, UMA will further decide what kind of credit structure it will use and what kinds of degrees it will seek to offer.

A secondary outcome resulting from this work will be the papers generated to stimulate the decision UMA makes. These papers will be made available to other interested parties.

O. Make decisions related to possible expansion of the consortium.

On the basis of the recommendations given to them, together with supporting documentation, the UMA Board will make a policy decision on expansion plans, and will begin during 1975-76 to implement the selected plan.

A secondary outcome will be a paper analyzing in detail alternative expansion plans, together with a discussion as to the pros and cons of each plan. The paper will be made available to interested parties.

P. Begin determination of social change brought about by UMA.

Policies relevant to the collection of certain kinds of data related to monitoring social change will be developed. These policies should influence the allocation of resources to the measurement of social impact.

A number of papers useful in interpreting data on social change will be developed for use within UMA planning circles and by interested parties outside UMA.

Q. Disseminate information about the model regional open learning system.

Generalizable knowledge about UMA and what it has discovered about open learning will be widely disseminated.

An important international open learning conference will take place under UMA sponsorship.

A national depository of information about open learning programs will be continued.

Effective means of publicizing UMA programs and services for prospective learners will be developed.

R. Conduct general administrative functions, including summative evaluation.

There are a variety of functions which are germane to several elements of the five-year plan of operation, and administrative functions which are critical to the operation of UMA. Among those functions are:

1. To continue examination and exploration of factors leading to economic self-sufficiency.
2. To establish procedures to insure organizational capacity to use the kinds of evaluative and experiential data suggested throughout this proposal.
3. To begin to relate course costs to course effectiveness.
4. To encourage lease of UMA courseware and determine effective procedures and policies related to leasing.
5. To provide opportunities and encouragement for professional staff development.
6. To provide leadership and management expertise for the entire operation.
7. To provide for policy recommendations to the UMA Board of Trustees about all the tasks identified in the five-year plan.
8. To arrange for an external summative evaluation of UMA.

This review of goals, scenarios and planning statements provides a rather inadequate picture of what UMA is, or intends to be. Not only do the goal statements reflect an ideal that may or may not be obtainable, they may also be misleading in their very simplicity. Whether or not the external evaluators press for further clarification of statements like these depends in part on their own pilosophical orientation towards their role as "objective" observers. However, the basic utility of finite criteria for program evaluation

is also subject to criticism as Weiss and Rein (1972, p. 237) have pointed out.

> The difficulty underlying the development of criteria in terms of which a broad-aim program may be evaluated is not that the aims of the program are unformulated, although there may be many different interpretations of their meaning which themselves will change over time, but rather that they may be specified in many different ways, any of which would be considered desirable by program administrators. The administrators of a broad-aim program are apt not to know in advance exactly how the system change they hopt to achieve will manifest itself. Although they might be prevailed on to list in advance the kinds of changes they hope will result from their programs, they will nevertheless be opportunistic in their program management and will direct program energies to those system changes which appear to be within reach, whether or not these were included among their initial aims. The attempt to evaluate the success of broad-aim programs in terms of the change in narrowly defined criteria is not only difficult; it also misrepresents the actual aims of these programs.

One of the initial concerns for the external evaluator, and one of the concerns this paper cannot effectively address, is the determination of the role and utility of specific goals/criteria in the evaluation of UMA. However, the remainder of this paper describes some things UMA hopes to see in an external evaluation.

DESIGNING AN EVALUATION PLAN: BASIC CONSIDERATIONS

A number of considerations interact in the formation of an evaluation plan. Situational variables such as the growth of the organization, the information demands of various audiences, and the organization's attitude towards evaluation studies, all influence basic decisions on the conduct of evaluation activities. The following discussion reviews a variety of issues affecting UMA's evaluation plan.

The Evaluation Setting

The five year planning period bridges some major changes in UMA and SUN's organizational development. During the first several years, both organizations will still be engaged in redefining their objectives, setting up their staff, and altering various procedures as they receive initial indictions of what works. By the fourth and fifth years, the situation should have changed dramatically. At that time the organization should have begun to assume its final shape, and it will be possible to examine its impact. The scenarios reviewed earlier provide some means of contrasting the current organization with that of the fifth year.[2]

UMA's rapidly evolving character has a number of implications for evaluation. For example, it will be inappropriate and unrealistic to ask the same questions and expect the same evaluation activities over each of the five years. For example, in the fifth year it may be possible to arrive at some overall determination of UMA's cost-effectiveness in the development and delivery of educational services; before then, such an effort would be unrealistic.[3]

The problem of determining what kind of evaluation information is appropriately gathered at what point in the organization's development is quite

complex. Obviously, UMA needs a variety of feedback in its formative or development stage. Equally obvious is the fact that summative judgments of the project's worth must be made, but if made too early may result in the demise of a useful idea. Meanwhile, each succeeding year means a larger commitment of resources and a very expensive wait for that evaluation information.

Ideally, UMA would like to have the best of both worlds. It values the help that rigorous formative evaluation activities can provide, both in the information they yield, and in the general process of questioning and discussion they engender. At the same time, UMA recognizes the valuable perspective gained through objective summative evaluation. Somehow, evaluation activities should provide both formative and summative data at appropriate stages of the project's development.

Evaluation Audiences and Information Needs

The broad evaluation expectations outlined above can be defined more clearly through an analysis of the information needs of the various audiences involved. Of course, it would take a major evaluation study just to determine the specific questions each audience will want answered over the planning period. However, it is possible to determine some general audience information requirements through an analysis of the relevance of basic evaluation questions to the various audiences. Brophy, Grotelueschen, and Gooler (undated, p. 3) have identified some of these basic questions and grouped them according to their basic informative purposes.

Evaluating for program planning

What program preferences and needs are held by various people and institutions?

What discrepancies exist between desired and actual status of various program elements?

What means are feasible for attaining desired goals?

What will happen if proposed goals are attained?

Who are the advocates and adversaries of the proposed program?

Evaluating for program improvement

Are strategies working as planned?

What unanticipated results are affecting program operation?

Are program issues being dealt with satisfactorily?

Is there sufficient program flexibility to meet new preferences or concerns?

Is the program content appropriate and effective?

Are internal/external relations hindering or enhancing program strategies?

Is the program as effective as similar programs?

Evaluating for program justification

Are the goals of the program justifiable as viewed by various people?

What was not attempted because of the existence of this program?

What exactly was done and what were the results?

Should the program be altered, expanded or disbanded?

What do advocates and adversaries want to know about the program?

This list is incomplete, but it does accurately describe the range of possible questions. UMA will need information from all three categories (planning, improvement, and justification) over the next five years.

The University of Mid-America is one of several audiences for evaluation information. For planning purposes, an "audience" is anyone who is involved in or affected by UMA's existence. Primarily this means UMA's staff, its students, and its funding agencies, particularly the National Institute for

Fig. 1. SAMPLE EVALUATIVE INFORMATION NEEDS OF VARIOUS AUDIENCES

Ratings:
2 - Information required by that audience
1 - Information useful to that audience

INFORMATION TYPE	AUDIENCE TYPE: Internal Audience									External Audience								
	Evaluation Staff (as audience)	Media Production Staff	Course Development Teams	Delivery System Administrators	UMA Administration	Learning Center Personnel (Resident Faculty)	Course Instructors	Students	Potential Students	Other Innovative Projects	Other Educational Institutions	Potential Distributors of UMA Courses	Potential UMA Members	Academic Content Experts	Educational Researchers and Theoreticians	Policy Makers and Public Officials	Funding Organizations
EVALUATING FOR PROGRAM PLANNING																	
What program preferences are held by whom?	2				2								1				
What discrepancies exist between desired and actual status program?	2				2								1			2	2
What means are feasible for attaining desired goals?				1	2					1	1		1		2		1
What will happen if proposed goals are obtained?	2	1	1	2	2	1		2	1		1		2		1	2	2
Who are the program's advocates and adversaries?	2				2				1		1	1	1			2	2
EVALUATING FOR PROGRAM IMPROVEMENT																	
Are strategies working as planned?	1	1	1	2	2	1		2	2	1	1		2				2
What unanticipated results are affecting the program?	1	1	2	2	2	1				1	1	1	1		1	1	2
Are program issues being dealt with?	1		1	1	2		1	1				1	1	1	1	1	1
Is there sufficient program flexibility?	1	1	2	2	2	2	1	1	1				2				
Is the program content appropriate and effective?	2	2	2	2	2	1	2	2	2	1	1	2	2	2	1	1	2
Are internal/external relations hampering program efforts?	1		1	2	2						1		1			1	1
Is the program more effective than comparable programs?	1	1	1	2	2	1	1	2	1	1	2	1	2		1	2	2
EVALUATING FOR PROGRAM JUSTIFICATION																	
Are the goals justifiable to various audiences?	1			2	2						1		1			2	2
What was not attempted because of this program's existence?	1			1	2					1	1		1			2	2
What exactly was done, and what were the results?	2	2	2	2	2	2	2	2	2	1	1	2	2	1	1	2	2
Should the program be altered, expanded, disbanded?	1	1	2	2	2	1	1	1	2	1	2	1	2			2	2
What do advocates and adversaries want to know?	2				2								2		1		2

Education. This last audience, NIE, is of primary importance as both the funder of the project and (directly or indirectly) its evaluation activities. Figure one compares the various audiences with the types of questions indicated by Brophy, et al. The diagram should not be interpreted as defining priorities for various kinds of information, but simply as an indication of whether a particular audience requires the information to complete its job, would find the information useful, or has no need for the particular data.

As complex as that diagram makes the evaluation task appear, it should be remembered that the diagram is really a simplification. For example, it does not address the time factor identified earlier: that certain information is appropriate and useful only at specific points in the life of the project. However, it should also be pointed out that not all of those questions are the responsibility of the external evaluator.

In-House and External Evaluation Responsibilities

Some basic distinctions can be drawn between the in-house and external evaluators as to who is responsible for providing which types of information. Each of these evaluator-types has certain advantages and disadvantages in different situations.

The external evaluator is apt to be more credible to an external audience. He is not personally or emotionally attached to the project, and therefore is assumed to be more objective than the in-house evaluator. Whether or not the external evaluator actually is more objective, he is certainly able to look at things from a fresh perspective, and his observations may be particularly valuable for that reason alone.

The value of the in-house evaluator lies in his closeness to project activities. Since he works with project staff on a daily basis, he is often more sensitive to finite changes, problems, and successes. Internal audiences

may also feel that the in-house evaluator is more credible. In any event he is apt to be providing data on the more day-to-day aspects of the project.

In general, the distinction between the in-house and external evaluators is one of roles.[4] The in-house evaluator can be described as operating in the formative evaluation role. The goal of his evaluations is still the judgment of worth, but his activities are directed towards the development or improvement of specific project activities. On the other hand, the external evaluator has a summative role. It is his job to judge the worth of complete entities at a particular moment in time. The direction and scope of his activities is not directed by project development requirements, but primarily by the dictates of obtaining a complete and accurate picture of his subject.

This distinction oversimplifies the situation. Information and judgments from the external evaluator may be used in a formative sense to redirect project planning. At the same time, many services performed by the in-house evaluator may be summative or focused on a particular project aspect. However, the in-house evaluator is primarily responsible to UMA staff and administration, while the external evaluator has a more direct tie to the funder and other external audiences.

With certain qualifications, then, the external evaluator should act in a summative role to address those questions of primary importance to external audiences. The in-house evaluator should be seen in a formative role addressing questions of primary utility to the project staff. However, either evaluator should be free to use the other's efforts as input to his own decisions.[5]

The Focus of External Evaluation

The preceding discussions have identified a particular sphere of concerns for external evaluation. The next task is to define a set of evaluation guidelines which take into account the various considerations of audience needs,

organizational change, and appropriately timed measures. The solution seems to be a consideration of the five year evaluation period in terms of the intrinsic/pay-off distinction suggested by Scriven (1967, pp. 53-54).

> Two basically different approaches to the evaluation of a teaching instrument appear possible, and are often contrasted in the literature. If you want to evaluate a tool, say an axe, you might study the design of the bit, the weight distribution, the steel alloy used, the grade of hickory in the handle, etc., or you might just study the kind and speed of the cuts it makes in the hands of a good axeman. (In either case, the evaluation may be either summative or formative, for these are roles of evaluation, not procedures for doing evaluation.
>
> The first approach involves an appraisal of the instrument itself, in the analog this would involve evaluation of the content, goals, grading procedures, teacher attitude, etc. We shall call this kind of approach intrinsic evaluation. The criteria are usually not operationally formulated, and they refer to the instrument itself. The second approach proceeds via an examination of the effects of the teaching instrument on the pupil, and these alone, and it usually specifies these rather operationally. It involves an appraisal of the differences between pre- and post-tests, between experimental group tests and control group tests, etc., on a number of criterial parameters. We can call this pay-off evaluation.

In terms of the five year plan, the external evaluation should begin with an intrinsic focus, and during the third year, switch to pay-off concerns. Under the intrinsic focus, the evaluator will concentrate on such things as determining the worth of SUN as a model delivery system, or reviewing the congruence between stated goals and actual staff activities. As UMA and SUN get beyond their initial organizational difficulties and begin to resemble their intended functional status (during years four and five), the evaluation will shift to a pay-off focus and start looking at UMA's ability to facilitate change in adult attitudes, or impact on the activities of existing postsecondary institutions.

Under both foci, the evaluator remains in a summative role, protects his external perspective, and provides useful information to external audiences.

The difference is that under intrinsic evaluation, the evaluator focuses on the project itself. He analyzes its current procedures, plans, and activities in comparison to its own goals and standards on such things as effective administrative procedures, etc. Under pay-off evaluation, the evaluator focuses away from the internal workings of the project and onto selected areas of the project's environment; looking for identifiable outcomes and judging the overall worth or cost-effectiveness of obtaining them.

As an evaluation plan, this changing-focus technique solves several problems. First, it enables the activities of the external evaluator to be useful both to UMA and the external audiences. Particularly during the intrinsic focus, UMA can receive helpful planning information at a crucial stage in its development. At the same time, external audiences, such as NIE, are regularly informed of UMA's progress from an objective viewpoint. The second advantage of this approach is that it enables the project to undergo early external review without an unrealistic emphasis on the project's ability to produce premature results.

Finally, this approach enables the evaluator to "warm-up" to his task by putting the hardest judgments last. The determination of specific benefits resulting from postsecondary education is quite hard in any case, but is particularly hard given a non-traditional program with the goals and projected clientele of UMA. It is quite possible that the external evaluator may have to do extensive field work in the first few years in order to define workable criteria, standards, and indicators for judging UMA's impact. Most studies do not have this preparation time and fall subject to a methodological criticism defined by Provus (1972, p. 35).

> To evaluate something while at the same time we are deciding on a standard is like judging a defendant's guilt while we are in the process of gathering evidence. One day the defendant may appear to be guilty, the next day not, depending on what

> evidence we have found at the moment. Further, to judge a defendant without a set of rules about the rules of evidence and acceptable judicial procedure would be to expose the defendant to the whim of the value system of his judge, much like the witchcraft trials of New Salem.

Neither this, nor any other plan or system of evaluation, can really solve many of the problems the evaluator deals with in the course of his study. If this plan has any utility, that utility is derived from the fact that it describes what is expected of the evaluator while giving him the freedom to solve the problems in his own way. This discussion of the two-focus approach is as close as this plan comes to any methodological specifications. The next section is mainly an operational definition, or extended example, of how this approach might be applied.

AN OUTLINE FOR EXTERNAL EVALUATION ACTIVITIES

This section describes the basic activities and products of external evaluation over the five year planning period. It is only an outline of the evaluation, as much of what actually occurs will depend on variables such as who the evaluator is, the evalutor's relationship to UMA and NIE, and the funding level for both the project and the evaluation. Some assumptions have been made about these variables in order to develop this outline. These assumptions are reviewed below, followed by a chronological outline of evaluation activities in terms of the intrinsic and pay-off foci explained earlier.

The external evaluator's effectiveness depends in large part on who he is, and what his relations are with UMA and NIE during the study. It is assumed that the external evaluation will be primarily conducted by one individual or agency throughout the five year period. Other evaluators may be brought in for specific tasks, or to cross-check findings, but only through a long-term, continuous involvement can the evaluator provide UMA and NIE

with the kind of sensitive, accurate, and comprehensive feedback needed.

A related assumption is that the evaluator will work in an atmosphere of mutual cooperation with both UMA and NIE. Both organizations must work together to obtain maximum benefit from the evaluation. First, they should arrive at a joint decision as to who will conduct the evaluation. Later, the evaluator will have to work with both in narrowing down the specific information needs to be addressed. Finally, as evaluation results are ready, there has to be a free exchange between all three parties in order to understand and apply the implications of those findings.[6]

With this as background, the evaluation activities can be outlined for each of the five years. As was discussed earlier, the demands of the situation call for an evaluation focus which changes from intrinsic to pay-off concerns. The first two years will be devoted to intrinsic issues, while the fourth and fifth years will be devoted to pay-off concerns. The third year is transitional, doing a little with both areas.

Years One and Two: Intrinsic Evaluation

Define Information Needs

As one of his first tasks, the evaluator must define the specific audiences and information needs he intends to serve. He should begin by developing an inventory of issues as identified by UMA and SUN personnel. This inventory should then be reviewed by NIE and representatives of various external audiences. A final determination of the specific information needs that will be met should be worked out in conference between NIE and UMA. The evaluator's own considerations for what is feasible and appropriate should play a large role in this determination. Although it is early, an attempt should be made to identify the primary issues for the whole five year period.

Determine the Scope of Intrinsic Evaluation

Working from the information needs defined above, the evaluator should develop a specific plan and set of goals for the intrinsic evaluation period. In her work on improving the utilization of evaluation data, Carol Weiss (1972, p. 323) has described some characteristics of studies that should also be used as the defining criteria of an effective intrinsic evaluation:

1. the explication of the theoretical premises underlying the program, and direction of the evaluation to analysis of these premises;

2. specification of the "process model" of the program -- the presumed sequence of linkages that lead from program input to outcome, and the tracking of the processes through which results are supposed to be obtained;

3. analysis of the effectiveness of components of the program, or alternative approaches, rather than all-or-nothing, 90 or no-go assessment of the total program.

A formal copy of the plan should be submitted to both UMA and NIE for their reactions.

Establish Data Records

The evaluator should define the kinds of base-line data he is apt to rely upon in the future, and should establish a standard, on-going system for gathering and recording those data. The external evaluator should work closely with the in-house evaluation staff on this activity.

Conduct the Evaluation

The evaluation should be conducted so as to achieve a working compromise between the time requirements of gathering and interpreting data, and the organizational demands for timely feedback. The external evaluator is not providing a data service for UMA. However, the nature of intrinsic concerns is such that the practical utility of the evaluation information is of considerable importance. The external evaluator should try to orient his

activities towards providing UMA with specific conclusions at a useful point in time.

Reporting Results

The evaluator should make a formal report of his activities and findings twice each year. The full report should be given to both UMA and NIE, and then later to such external audiences as they see fit.

Year Three: Transition

Complete Intrinsic Evaluation

Any remaining work from the first two years should be completed and reported. The external evaluator should also complete a final report on the overall success of his efforts during this period. Specifically, he should indicate any changes that need to be made in the conduct of external evaluation activities during years four and five. A separate report should be prepared by NIE, UMA, and other evaluation audiences as to the utility of external evaluation findings they have received thus far.

Review Information Needs

The external evaluator should review with UMA and NIE the specific information needs identified earlier as concerns for pay-off evaluation. The crucial (and answerable) questions may have changed since they were originally identified. A new round of discussions may be needed between UMA, NIE, and other audiences in order to redefine these concerns.

Plan Any Additional Studies

NIE and UMA, in consultation with the external evaluator, should determine whether there is a need for multiple evaluations during the last two years. A decision to conduct multiple evaluations might be based on a need to obtain

more than one viewpoint on the project's achievements. It might also be based on a desire to obtain a greater variety of evaluation findings than the current external evaluator can possibly provide. For example, it might be quite useful to bring in a goal-free evaluator so as to compare his findings with the heavily goal-based findings of the external evaluator.[7] Generally, there is a variety of benefits to be obtained from conducting several independent pay-off evaluations. Plans and procedures for any additional studies should be determined at this time.

Determine Scope of Pay-Off Evaluation

Working from the information needs defined above, the external evaluator should develop specific plans and goals for his efforts during the fourth and fifth years. A formal copy of these plans should be submitted to NIE and UMA. More detailed descriptions of what this plan should do are given below, along with a set of possible criteria for use in judging the project's overall worth.

Years Four and Five: Pay-Off Evaluation

Conduct the Evaluation

Completing an extensive pay-off evaluation requires a large commitment of time and resources. The last two years are exclusively devoted to this effort. In addition, it is assumed that the external evaluator will begin this effort with a useful set of data, instruments, and understandings derived from the last three year's activities.

Planning and conducting a complete pay-off evaluation is quite difficult; determination of worth is an elusive pursuit. Scriven (1974) has devoted considerable attention to defining the necessary components for judging the worth of educational products or projects. With slight modification, Scriven's

conclusions serve as a good model for the range of judgments needed in a complete evaluation of UMA and its delivery systems.[8]

1. Need (Justification) Does the project fulfill a defensible need? want?
2. Market (Dissemination) Is the project capable of reaching an adequately large and appropriate clientele?
3. Performance--True Field Trials How well do the materials perform under a field test situation?
4. Performance--True Consumer How well do the materials perform after they are established in every day use?
5. Performance--Crucial Comparison How does the project compare to others where such a comparison is appropriate?
6. Performance--Long Term Does a follow-up study produce any new outcome data?
7. Performance--Side Effects Can a systematic independent evaluation determine any side-effects of project activities?
8. Performance--Process How does the process of material development, dissemination, and utilization function?
9. Performance--Causation Can any particular outcomes be specifically attributed to the project's existence?
10. Social significance To what extent can it be shown that the provision of an open learning, adult education, system is of benefit to the society?
11. Cost-effectiveness To what extent is the project cost-effective or under what conditions could it become cost effective?
12. Extended support To what extent will the project continue to revise its services and extend its benefits to new audiences?

These twelve questions describe an ideal range of evaluation concerns. UMA, NIE, or the external evaluator may wish to alter these questions in response to other concerns. However, the external evaluator should realize that his efforts may be judged in terms of these points.

Report Results

The evaluator should submit a formal report of his activities twice each year. An interim report or first draft of his findings should be made available during the last half of the fifth year. This will allow UMA or NIE to request any particular changes or clarifications before the final report is completed.[9] Full copies of all reports should go to both UMA and NIE, and later to other audiences that they feel appropriate.

Throughout the five year period, the evaluator should explain all of his

findings in terms of the process and data used in their determination. Stake (1967) has specified a model for the full reporting of evaluative information that includes both descriptive and judgmental kinds of data. It is assumed that the external evaluator will provide this type of in-depth reporting.

This completes the outline of evaluation activities. Obviously, a more detailed plan will be needed before the study can actually begin. However, this outline does present the key points and issues that should be considered in all future plans.

A Starting Point

This paper represents a starting point in planning for an external evaluation of UMA and its related delivery systems. It began by describing the subject for evaluation in terms of its structure, history, goals, and future plans. This was followed by a review of expectations for the external evaluation, and a discussion of how the focus and conduct of the evaluation will influence the utility of its findings. Finally, the five year period was outlined in terms of basic activities or events with considerations for the completeness of specific evaluation products.

As a planning document, this paper has tried to present the key issues and some ideal solutions. As other evaluators and members of NIE and UMA react to these suggestions, the real plan will begin to emerge. This paper will have served its purpose if it provides a common set of useful understandings that future discussions can build upon.

NOTES

1. For a further discussion of the need for open learning systems, see the report by the Commission on Non-Traditional Study, Diversity by Design (1972); or the Carnegie Commission on Higher Education's Less Time, More Options: Education Beyond High School (1971).

2. SUN and the other state delivery systems are not always mentioned by name in this discussion. They are assumed to be an integral part of UMA unless otherwise indicated. There are some possible future evaluation questions which may require an exclusive focus on the delivery system alone, but such questions are not the concern of this paper.

3. While anything approaching a complete analysis of cost-effectiveness may be inappropriate for at least five years, it is the case that people will ask questions about this issue prior to that time. UMA will have to develop an early framework for answering such questions.

4. See Scriven (1967) for a full explanation of evaluation's roles and goals.

5. Throughout the paper is an assumption that the external evaluator is responsible for rendering his own judgments in addition to gathering and supplying information to other decision makers. Obviously, the evaluator's judgments must be substantiated and others may choose to accept or reject his conclusions. The point is that the external evaluator is more likely than other decision makers to have the perspective and information needed for objective judgments.

6. The external evaluator should work with, and report to both UMA and NIE. However, in case of conflict, NIE has to have sole, ultimate responsibility for the position.

7. For a complete discussion of the relative merits of goal-free and goal-based evaluation see Scriven (1972).

8. Scriven specifies thirteen criteria for evaluating educational products. One of these criteria, "statistical significance," has not been included since its emphasis was inappropriate for this situation.

9. At this late date, the external evaluator should not be compelled to alter his study. This interim review serves mainly to provide UMA and NIE with advance notice of any emerging problems with data completeness or interpretation. If such problems exist they may decide to conduct additional work.

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